

US EPA ARCHIVE DOCUMENT

Setting Priorities

What should we
work on first?





Where Do You Start?

Low hanging fruit?

Projects with rebates?

Low cost projects?

What the GM wants?

What customer wants?



Analyze Your Data

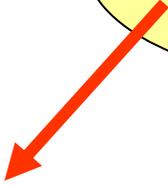
| Activity | Operation or Location | Type of Energy Used | Current Use and Costs |
|---|--|---------------------|--|
| Heating, Ventilation, and Air Conditioning (HVAC) | Operations Building (Heating) | Natural Gas | <ul style="list-style-type: none"> • 150 MMBTU/year • \$1,500/year |
| | Operations Building (Cooling, Ventilation) | Electricity | <ul style="list-style-type: none"> • 10,000 kWh/year • \$1,000/year |
| Lighting | Operations Building | Electricity | <ul style="list-style-type: none"> • 24,000 kWh/year (4 kWh/ft², 6,000 ft²) • \$2,400/year |
| Vehicle Use | Service Trucks | Diesel Fuel | <ul style="list-style-type: none"> • 1,000 gallons/year • \$2,500/year |
| Equipment | | | |
| Pump #1 | Treatment Building | Electricity | <ul style="list-style-type: none"> • 400,000 kWh/year • \$40,000/year |
| Pump #2 | Treatment Building | Electricity | <ul style="list-style-type: none"> • 480,000 kWh/year • \$48,000/year |
| Pump #3 | Treatment Building | Electricity | <ul style="list-style-type: none"> • 280,000 kWh/year • \$28,000/year |
| Pump #4 | Treatment Building | Electricity | <ul style="list-style-type: none"> • 160,000 kWh/year • \$16,000/year |

Set Your Ranking Criteria

- Feasibility
- Costs to implement
- Rate of return, return on investment
- Regulated activity
- Availability of funding
- Other?

Sample Matrix Ranking

You determine these criteria



| ACTIVITY | Reg | Impact | Toxic | Easy | ROI | Cost | Total |
|----------|-----|--------|-------|------|-----|------|-------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Key: 5 = high 3 = moderate 1 = low 0 = N/A

Priority Ranking Worksheet Example

| Activity | Operation or Location | Type of Energy | Current Costs | Ranking Criteria to Set Priorities (Examples only) | | | | | | | |
|--|--|----------------|---------------|--|---|--|--|--|---|--|-------------|
| | | | | Current/ Projected Costs 1= L 3= M 5= H | Feasibility of Energy Efficiency Projects 1= not feasible 3= feasible 5= Very feasible | Feasibility of Alternative, Renewable sources? 1= L 3= M 5= H | Costs to implement 1= H 3= M 5= L | Availability of Funding 1=Capital funds required 3=potential or not known 5=Funding options available | Rate of Return on Investment 1= More than ____ years 3= ____ years 5= Less than ____ years | Regulated? 0=No 3=Yes 5=Yes and compliance issues exist | Total Score |
| Heating, Ventilation, and Air Conditioning | | | | | | | | | | | |
| | Operations Building (Heating) | Natural Gas | \$1,500/year | 1 | 3 | 1 | 3 | 1 | 1 | 0 | 10 |
| | Operations Building (Cooling, Ventilation) | Electricity | \$1,000/year | 1 | 3 | 1 | 3 | 1 | 1 | 0 | 10 |
| Lighting | | | | | | | | | | | |
| | Operations Building | Electricity | \$3,000/yr | 1 | 5 | 1 | 1 | 5 | 5 | 0 | 18 |
| Vehicle Use | | | | | | | | | | | |
| | Service Trucks | Diesel Fuel | \$2,500/yr | 1 | 5 | 1 | 3 | 1 | 1 | 3 | 15 |
| | Service Trucks | Diesel Fuel | \$2,500/yr | 1 | 1 | 5 | 3 | 3 | 1 | 3 | 17 |
| Equipment | | | | | | | | | | | |
| | Pump #1 | Electricity | \$40,000/yr | 5 | 3 | 1 | 3 | 1 | 3 | 3 | 19 |
| | Pump #2 | Electricity | \$48,000/yr | 5 | 3 | 1 | 3 | 1 | 1 | 3 | 17 |

Ranking Worksheet

SAMPLE ENERGY PRIORITY RANKING TABLE (Guidebook, page 40)

| Activity | Ranking Criteria to Set Priorities | | | | | | | Total Score | |
|---|------------------------------------|--|--------------------------------|---|--|------------------------------------|---------------------------------------|-------------|----|
| | Current/ Projected Costs | Feasibility of Energy Efficiency Projects | Costs to implement | Availability of Funding | Rate of Return on Investment | Environmental Benefit | Regulated? | | |
| | 1= Low 3= Medium 5= High | 1= not feasible 3= feasible 5= Very feasible | 1= High 3= Medium 5= Low | 1=Capital \$ req'd 3=not known 5=\$\$ available | 1= >5 years 3= 4 years 5= <3 years | 1=none 3=some 5=sig. benefit | 0=No 3=Yes 5=Yes / issues exist | | |
| Heating, Ventilation and Air Conditioning | | | | | | | | | |
| heating - new boilers | | 3 | 5 | 1 | 1 | 2 | 4 | 0 | 16 |
| air conditioning - install new | | 3 | 3 | 1 | 1 | 1 | 3 | 0 | 12 |
| weatherstripping, caulking | | 1 | 5 | 5 | 5 | 5 | 3 | 0 | 24 |
| | | | | | | | | | 0 |
| Lighting | | | | | | | | | |
| Replace lighting to T-5 | | | | | | | | | 0 |
| Replace incand w/CFL | | | | | | | | | 0 |
| Install 6 skylights | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| Pumps | | | | | | | | | |
| Replace pump #1 | | | | | | | | | 0 |
| Retrofit pump #2 | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| Vehicles | | | | | | | | | |
| Replace 3 trucks w/hybrid trucks | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| Renewable Energy | | | | | | | | | |
| Install solar panels | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| Other | | | | | | | | | |
| | | | | | | | | | 0 |
| | | | | | | | | | 0 |



Priority Ranking Steps

1. Decide on criteria
2. Decide on ranking system and values
3. Complete the ranking
4. Review the numerical rank order and “reality test”
5. Select as many top-ranked items as you are able to handle

Afternoon Break

